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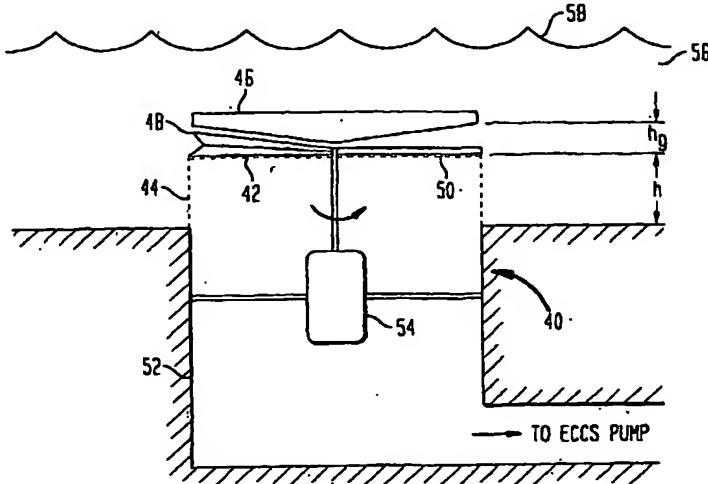
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(54) Title: IMPROVED SELF-CLEANING STRAINER



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(57) Abstract: An externally powered, self cleaning strainer incorporating a projectile shield, which is capable of operating for an extended period of time. A suitably shaped, motor, driven, impeller creates a localized, radially outward flow of fluid in the vicinity of the strainer inlet. The projectile shield has a lower surface shaped to deflect fluid to the strainer at a constant velocity, enabling the impeller to eject debris more efficiently. Maintaining a constant flow through the strainer also avoids additional head loss associated with accelerating flow. The self cleaning strainer may also include a brush attached diametrically opposite to the impeller to aid in removing debris from the inlet side of the strainer. The impeller may also be shaped so that when it is swept past the inlet side of the strainer, it causes a localized, reverse flow through the strainer, thereby removing debris particles from within the strainer.



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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/14875

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B01D 37/00  
US CL : 210/791, 355, 391, 408, 411, 413, 415, 416.1, 455, 456, 460

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 210/791, 355, 391, 408, 411, 413, 415, 416.1, 455, 456, 460

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,688,402 A (GREEN et al.) 18 November 1997 (18.11.1997), see entire document.	1-21

Further documents are listed in the continuation of Box C.

See patent family annex.

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Date of the actual completion of the international search

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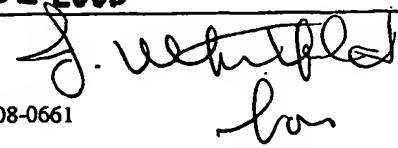
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